

Professional and Managerial Branch
Engineering Group
Traffic Engineering Series

TRAFFIC ENGINEERING ASSOCIATE I*

08/00 (LBT)

Summary

Under general supervision, perform a variety of traffic engineering functions which require the application of standard engineering techniques and procedures.

Typical Duties

Study traffic flow to detect unsafe or congested conditions. Involves: evaluating statistical and physical data regarding vehicular and pedestrian volume, projected traffic loads and other pertinent considerations; conducting tests on alternate or same route with modifications in signals, traffic direction or other traffic controls; integrating results of studies with other agencies to develop regional transportation plans.

Determine need for traffic controls. Involves: designing and determining materials and costs of traffic control installation; preparing specification for traffic control equipment; drafting plans for intersection improvements and traffic signal installation; checking horizontal and vertical curves for sight distances, safe lighting and alignment of intersections and roadways; evaluating experiments and preparing recommendations for improving conditions; computing traffic signal timing; performing transportation planning, as assigned.

Supervise technical and clerical support staff as assigned. Involves: scheduling, assigning, instructing, guiding, checking and evaluating work; arranging for or engaging in employee training and development; enforcing personnel rules and regulations, standards of conduct, work attendance, and safe work practices; counseling, motivating and maintaining harmonious working relationships among subordinates; recommending staffing and employee status changes; interviewing applicants.

Perform related incidental duties contributing to realization of unit or team objectives as required. Includes: substituting for supervisor or coworkers as qualified and within authorized limits by carrying out specified functions to maintain continuity of ordinary operations, if delegated; providing designated support for projects or activities overseen by higher-grades, non-supervisory personnel as instructed; preparing and conducting presentations before public groups; explaining and demonstrating work performed to assist supervisor in orienting and training less knowledgeable employees; engaging in assignments pertaining to functions of other positions for training purposes under general supervision; maintaining awareness of occupationally related technological, legal, and methodological developments; logging activities; preparing and submitting recurring or special status reports; keeping tools, equipment and work area orderly, safe and clean.

Minimum Qualifications

Training and Experience: Graduation from an accredited college or university with a Bachelor's Degree in Civil, Electrical and Computer, Mechanical, Traffic Engineering or related engineering field.

Knowledge, Abilities and Skills: Some knowledge of: the principles of engineering as they apply to surveying, drafting and designing; methods, materials, tools and equipment used in traffic control construction; cost determination techniques.

Ability to: prepare designs, plans and specifications of traffic control projects; express oneself clearly and concisely, both orally and in writing; establish and maintain effective working relationships with fellow employees and the general public; maintain records and prepare reports.

Skill in the safe operation and care of: personal computer or network work station, including computer-aided drafting and design (CADD), geographic information system (GIS), word processing, spreadsheets and database software; standard drafting instruments; time and distance measuring devices; motor vehicle through city traffic.

Physical Effort & Work Environment: Frequently inspect field installations at construction sites which involves moving about uneven terrain, climbing ladders, bending and stooping, and exposure to other adverse field conditions.

Special Requirement: Respond to Public Works emergencies as necessary during non-working hours.

Licenses and Certificates: Texas Class "C" Driver's License or equivalent license issued by another state.

* The title of Traffic Engineer I can be used provided registration as a Professional Engineer in the State of Texas has been obtained.

Director of Personnel

Department Head

OFFICIAL